

ABSTRACT

Techniques to determine the rate for a data transmission in an OFDM system. The maximum data rate that may be reliably transmitted over a given multipath (non-flat) channel by the OFDM system is determined based on a metric for an equivalent (flat) channel. For the given multipath channel and a particular rate (which may be indicative of a particular data rate, modulation scheme, and coding rate), the metric is initially derived from an equivalent data rate and the particular modulation scheme. A threshold SNR needed to reliably transmit the particular data rate using the particular modulation scheme and coding rate is then determined. The particular rate is deemed as being supported by the multipath channel if the metric is greater than or equal to the threshold SNR. Incremental transmission is used to account for errors in the determined data rate.